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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/510,477	10/07/2004	Hans-Helmut Goertz	53405	7354	
26474	7590 09/06/2005		EXAM	EXAMINER	
NOVAK DRUCE DELUCA & QUIGG, LLP			TRUONG, DUC		
1300 EYE STI	REET NW		c		
SUITE 400 EA	AST		ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20005		1711		

DATE MAILED: 09/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	<i>Vy</i>			
	10/510,477	GOERTZ ET AL.				
Office Action Summary	Examiner	Art Unit				
	Duc Truong	1711				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet v	vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUN 36(a). In no event, however, may a will apply and will expire SIX (6) MC , cause the application to become A	ICATION. I reply be timely filed INTHS from the mailing date of this communic ABANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	_·		•			
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This	action is non-final.					
3) Since this application is in condition for allowar	nce except for formal ma	tters, prosecution as to the merit	s is			
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-9 is/are pending in the application.		•				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ acce	epted or b)☐ objected to	by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeya	ince. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	•	- · · · · · · · · · · · · · · · · · · ·	` '			
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attache	ed Office Action or form PTO-152	2.			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
a)⊠ All b)□`Some * c)□ None of:						
1. Certified copies of the priority documents						
2. Certified copies of the priority documents						
3. Copies of the certified copies of the prior		n received in this National Stage	l			
application from the International Bureau	` ','	h manaturad				
* See the attached detailed Office action for a list	or the certified copies no	t received.				
			•			
Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) D Notice of	Informal Patent Application (PTO-152)				
Paper No(s)/Mail Date  S. Patent and Trademark Office	6)	·				

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Edelmann et al or Chaloyard et al, both of record on 1449.

The Edelmann reference discloses the reactivity of the (n5-formylcyclopentadienyl) M (CO)3 anions (M=Cr, Mo, W) towards electrophilic reagents have been studied in that the electrophilic attack at the metal was found by Mo and tungsten, and can serve as catalyst in chemical reaction. (see Summary) in that specific catalyst has been disclosed on page 92 and Sn(CH3)2 can be replaced by halogen or Au(PPh3) (see Summary).

The Chaloyard reference discloses the synthesis of ring substituted derivatives of cyclopentadienyl Tricarbonyl complexes of molybdenum and tungsten in that specific formulae have been disclosed in Table I at page 3218.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over UK 1187233 in view of Edelmann or Chaloyard, they are of record on 1449.

The UK 1187233 discloses a process for preparing polyoxymethylene by polymerizing formaldehyde or trioxane or other source of oxymethylene inits, in the presence of an organometallic complex cation of the formula (see pages 1-2).

The disclosure of the reference differs from the instant claims in that it does not disclose the catalyst of the claimed formula I.

Edelmann and Chaloyard disclose that the ring substituted derivatives of cyclopentadienyl tricarbonyl complexes are included in organometallic complex cations and can be used as catalyst.

The person of ordinary skill in the art would be motivated to replace said catalyst as disclosed in UK 1187233 by the ring substituted derivatives of cyclopentadienyl tricarbonyl complexes of Mo and W, since they have the same functionality in the claimed process for preparing said polyoxymethylene, in order to gain the advantages of the combination of the references, that being polyoxymethylene polymer which has the added property of improving the reactivity of the anions towards electrophilic reagents.

UK 1187233 discloses a process for preparing polyoxymethylene by contacting a formaldehyde source with an organometallic cation catalyst.

Edelmann and Chaloyard disclose that the ring substituted derivatives of cyclopentadienyl tricarbonyl complexes are included in organometallic complex cations and can be used as catalysts.

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The inclusion of said catalyst in the method for preparing polyoxymethylene would not provide an unexpected result to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Truong whose telephone number is 571-272-1081. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUCTRUONG PRIMARY EXAMINER

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